

Remarks

ON

ADVANCES IN THE TREATMENT OF CANCER OF THE CERVIX UTERI.*

BY

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It was with some diffidence that I accepted the invitation to open a discussion on advances in the treatment of cancer of the cervix, for the reason that, since I retired from practice, just a year ago, my personal advance has been in the temporal rather than the gynaecological direction. But 'tis a pleasant thing, says Lucretius,† to watch our colleagues toiling, especially when they are at sea, and as lookers-on proverbially see most of the game, having played the game for forty years, perhaps I may be able to point out some advances which have been made, some advances which need making, and some methods of inquiry which give a false impression of the fact, the degree, and the direction of advance.

In this last connexion I would emphasize the futility of placing any reliance upon statistical inquiries based upon insufficient data, with which the literature of the subject abounds. These statistics purport to give the "absolute cure" rate of various methods of treatment in figures carried to two places of decimals, and if, like a celebrated Chancellor of the Exchequer, you inquire the meaning of those "damned dots," you will usually find that neither they nor the integers have any value, and that the "absolute cure" rate thus expressed is absolute cant. To ascertain the "absolute cure" rate—that is, the proportion of patients cured (after, say, five years) to patients seen—is a difficult matter on account of the large numbers concerned, the want of compulsory notification of cancer, and the absence of particulars of the treatment in the death certificates of patients who have been affected with cancer; but it may be done for small numbers without much difficulty, and I appeal to the younger gynaecologists to follow up for a period of five or ten

* Made in opening a discussion at the Medical Society of London on March 26th.

† "Suave, mari magno turbantibus acquora ventis,
E terra magnum alterius spectare laborem;
Non quia vexari quemquam est jucunda voluptas,
Sed, quibus ipse malis careas, quia cernere suave est."

years the first ten or twenty cases seen, and give full particulars, with the microscopic appearances of the cases and the final results; thus figures will be available for replacing the misleading statistics of the present day. I have done this for my cases of cancer of the cervix complicating pregnancy, of which the whole of my experience has been given.¹

In dealing with statistics it is very important that no case should be accepted as cancer unless it has been examined microscopically by experts in gynaecological pathology. The Obstetrical Society of London, more than a quarter of a century ago, established a pathology committee to which cases could be referred, and this continues to function in the Section of Obstetrics and Gynaecology of the Royal Society of Medicine, and is, so far as I know, peculiar to this country. The result has been that many English gynaecologists have devoted themselves to the study of the pathology of cancer of the cervix, and specimens accepted by that Section may be relied upon as true examples of cancer, whereas the mere statement that a case is cancer, without examination, carries with it no such conviction.

I lay the more stress upon the importance of this advance in gynaecology because certain conditions closely resemble cancer of the cervix, and can only be diagnosed by those who have an expert knowledge of gynaecology. I may mention a few of these: erosions, leucoplakia, papilloma, adenoma, mucous tubercle, chancre, corroding ulcer, syphilitic and tuberculous ulcer, chorion epithelioma; and one—carcinoma adenomatodes (adenoma malignum)—in which even microscopic examination may lead to error. Having seen examples of all these conditions, in view of the paucity of cases which have been published, I cannot help feeling that among the long lists of cases of "cancer" operated on some may have owed their non-recurrence to their non-malignant nature.

Another direction in which advance is **needed** is in the early recognition of the cases, in advocacy of which I read a paper² at the meeting of the British Medical Association in 1907. I am hopeful that some benefit has resulted from that paper, and the discussion to which it gave rise, at all events in getting the doctors to examine their cases, though I am doubtful whether further measures are not needed for bringing the importance of early treatment before the public. I have found the visits of patients to the clinic on the anniversaries of their operation to be a valuable means of bringing the subject before hospital patients.

PREVENTIVE TREATMENT OF CANCER.

In the absence of knowledge of the essential nature of the disease the preventive treatment of cancer of the cervix is difficult. It is known that cancer of **the cervix** is almost limited to patients who have practised **sexual intercourse**, and mostly occurs in those who have **had one** or many pregnancies. Analogy with experimental **cancer** leads us

to suspect the irritation of lacerated and inflamed tissues as likely to lead to cancer, and they have been known to be followed by the disease. Treatment of these sources of irritation is indicated, and, in rebellious cases, removal of the cervix is called for.

One great advance in the prevention of cancer has been obtained by the substitution—for example, in cases of myoma—of total hysterectomy for the subtotal operation, thus avoiding cancer of the cervical stump, which has caused the death of several hundreds of women. It is a discredit to gynaecologists that these deaths should occur. I am glad to say that I abandoned the subtotal operation twenty-eight years ago; it would gratify me more than the last line of the quotation from Lucretius if my colleagues would do the same.

ADVANCES MADE.

I will now consider the advances which have been made in the treatment of cancer of the cervix.

Omitting a few pessimists, to whom I have alluded in the paper mentioned, it will be generally admitted that remarkable progress has been made during the hundred years that have passed since Blundell removed a cancerous uterus in 1828;* this was the first time that the cancerous uterus was successfully removed in this country.†

James Blundell, obstetric physician to Guy's Hospital, in 1823 wrote a valuable paper on "Researches physiological and pathological," which was not considered worthy of publication by the Medical and Chirurgical Society. The author published the paper privately in 1825; the copy of that paper in the library of the Royal College of Surgeons contains some manuscript notes by Blundell concerning the case of cancer of the cervix, and the specimen—preserved in the museum of the Royal College of Physicians—I am able, through the courtesy of the curators, to show you.

The experiments on animals performed by Blundell had an important influence in the development of abdominal section, and his case of vaginal hysterectomy for cancer of the cervix enlarged the field of operative treatment, which, until recent times, was the sole means of cure at our disposal. Hopeless indeed had been the outlook for patients from the earliest times of which we have records.

The Anglo-Saxon leech (about A.D. 900) treated cancer by applying the ashes of a hound's head to the wound; "if it will not yield to that take a man's dung, dry it, thoroughly rub to dust, apply it. If with this thou art not able to cure him thou mayest never do it by any means."³ Even as late as 1791 Lowder wrote of cancer of the uterus, "This is a disease so incurable that physicians give it up."⁴

That gynaecologists of the twentieth century are more hopeful is shown by the many researches in which they are

* The patient survived the operation nearly a year, dying on February 7th, 1829. Blundell also removed the cancerous uterus from three other patients, with fatal results.

† Sauter of Constance, in 1822, was the first to perform the operation successfully.

engaged, of which I need only mention that of Thies on immunization by cancer-albumin and implantation of cancer; and of Blair Bell on the treatment of the disease by lead, which he brought before this Society in 1926: it is too soon to pronounce an opinion on the value of this treatment, but its dangers have been pointed out by its originator. For the present, at any rate, the treatment of cancer of the cervix resolves itself into removal of the growth by operation or by radiation.

OPERATIVE TREATMENT.

Passing over the destruction of the growth by caustics or cautery and the simple removal of the cervix (first carried out by Osiander⁵ in 1801), the operative treatment may be divided into high amputation of the cervix and vaginal and abdominal hysterectomy.

1. *High Amputation of the Cervix.*

High amputation of the cervix, preferably by the electric cautery introduced by Byrne, is an excellent treatment for early cases, especially in elderly patients; it is free from risk and permits the continuance⁶ and the subsequent occurrence of pregnancy,⁷ in which respects it is superior to any form of hysterectomy. In patients operated on before the menopause it is sometimes followed by stenosis and dysmenorrhoea until the menopause occurs; yet even these patients have better general health than those who have been deprived of uterus and ovaries. I have watched such a patient for twenty-five years after the amputation, during which she has been able to fulfil her conjugal duties without trouble; in this respect also high amputation is superior to any kind of extended hysterectomy. It is the fashion to neglect this operation; but, in the case of an early cancer in an elderly subject, it is, in my opinion, the best means of operative treatment at our disposal.

2. *Vaginal Hysterectomy.*

(a) Simple vaginal hysterectomy was first successfully performed in this country by James Blundell on February 12th, 1828. Various are the methods of carrying it out. The use of the cautery, which I have constantly employed, has, I think, some advantages in lessening the haemorrhage at the operation and the frequency of recurrence of the growth. The whole operation is carried out with the cautery; but it is generally necessary to tie the uterine arteries and the broad ligaments. The vaginal operation has a very low rate of immediate mortality, and it has the advantages over the extended operation that it does not interfere with marital intercourse, nor, like the abdominal operation, give rise to scar-hernias. The minimal risk of the operation renders it of great value in enfeebled or aged patients. The superiority of the recovery over that after abdominal hysterectomy is so marked that it is surprising that there exist gynaecologists who never perform the operation.

(b) Extended vaginal hysterectomy consists in a more

extensive removal of the tissues with the help of paravaginal incisions, unilateral or bilateral, which facilitate the isolation of the ureters and very free removal of the cellular tissue. The operation, carried out with varying technique by Schauta, Thaler, Peham, Stöckel, and others, has a higher mortality rate than the simple operation, but it has been reduced to 2.7 per cent. by Peham, who claims an "absolute cure" rate of 31.13 per cent., against 27.9 per cent. for the extended abdominal operation.⁸ This is a very remarkable result, and is probably due to the lower mortality of the vaginal operation; for all vaginal operations have the disadvantage that the removal of many glands is impossible. The removal of *all* the pelvic glands is, of course, impossible by any operation, and it may be that the extensive removal of glands and cellular tissue has other disadvantages than that of increasing the risk of the operation.

The remarkable results obtained by the extended vaginal operation have somewhat withdrawn the attention of gynaecologists from the abdominal operation, in which the chief advantage lies in permitting the removal of infected glands. The extended vaginal hysterectomy, like the extended abdominal operation, interferes with marital intercourse.

In all kinds of vaginal hysterectomy it is important that the peritoneum should be carefully closed; gauze introduced into the peritoneum for drainage sometimes gives rise later on to intestinal obstruction produced by intestinal adhesions set up by the gauze.

3. *Abdominal Hysterectomy.*

(a) Simple abdominal hysterectomy is useful in cases where there are complications (uterine fibroids, tumours of the appendages) and where the weakness or advanced age of the patient renders the extended operation inadvisable. It permits more careful closing of the peritoneum than the vaginal operation, is less likely to be followed by obstruction, and has a lower rate of mortality than the extended operation.

(b) Extended abdominal hysterectomy, which will always be associated with the name of Wertheim of Vienna, was proposed by him as a more surgical operation than the vaginal procedure, in that it permits the wide removal of the tissues and of the pelvic glands. The chief drawbacks to the operation are its high mortality, its late sequelae (fistulae and urinary infection), and the interference with marital intercourse which it entails. Although the mortality rate has been lowered by the employment of gauze drainage,* I have not seen any statistics showing the frequency with which drainage is followed by hernia of the scar and intestinal obstruction. The employment of drainage does away with the complete closure of the peritoneum, which is one of the advantages of operating by the

* For example, by Faure, from "about 20 per cent." to 2.6 per cent., *Cancer de l'utérus*, 1925, p. 867.

abdomen, and favours the occurrence of hernia of the scar, the prevention of which is one of the advantages of operating by the vagina.

With regard to the removal of glands it is to be borne in mind that in about two-thirds of the patients operated on the glands are not cancerous, that the removal of glands (necessarily incomplete) increases the danger of the operation, and that it appears probable that cancerous glands can free themselves from cancer, especially with the aid of radiation. Many patients, however, have remained free from recurrence for as long as ten years after the removal of cancerous glands, which is a triumphant result of the extended abdominal operation.

4. Combined Abdominal and Vaginal Hysterectomy.

Combined methods of operating (abdomino-vaginal or vagino-abdominal) have some advantages in lessening the exposure of the peritoneum and the danger of infection.

5. Radiation Treatment.

Great indeed has been the advance in the treatment of cancer of the cervix since the employment of radium, mesothorium, and Roentgen rays. As my experience of this treatment only dates back about a dozen years, and my colleague is dealing with the subject, I will merely state that in my opinion it is the most important advance of all. Its curative effects are incontestable, and it is especially valuable in the treatment of cancer complicating pregnancy.⁹

CONCLUSION.

In conclusion, I wish to state my opinion that the treatment of cancer of the cervix should be eclectic and that no one treatment is suitable for all cases. During the past century a great advance has been made, so that to-day about two-fifths of the "operable" cases can be cured. This proportion might be doubled if the cases came for treatment at an early stage of the disease. The great desideratum is to get the cases early; they may then be treated by one of the methods mentioned. Of these the most hopeful for the future is the treatment by radiation, the technique and dosage of which merit the intensive study of British gynaecologists, which I am sure will be advanced by the contribution of our Belgian colleague, Max Cheval.

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- ² Idem: On Measures to be Recommended to Secure the Earlier Recognition of Uterine Cancer, *British Medical Journal*, 1907, ii, pp. 431, 439.
- ³ *Anglo-Saxon Leechdoms*, ii, 329; Payne's FitzPatrick Lectures, 1903, p. 81.
- ⁴ H. R. Spencer: *History of British Midwifery from 1650 to 1800*, 1927, p. 125.
- ⁵ See *Göttingische gelehrte Anzeigen*, 1808, p. 167.
- ⁶ Vitanza: *Archiv. di ost. e gin.*, 1898, p. 670; and *ibid.*, 1900, p. 257.
- ⁷ H. R. Spencer: *Tumours Complicating Pregnancy, Labour, and the Puerperium*, 1921, p. 160 (Case 5).
- ⁸ Kermauner; Halban and Seitz: *Biol. u. Path. d. Weibes*, 1927.
- ⁹ See Döderlein, *Monatsch. f. Geb. und Gyn.*, 1927, p. 454; Pouey, *Bull. de la Soc. d'Obstét et de Gyn. de Paris*, 1927, p. 702; and Berkeley.